

SEMICONDUCTOR LASER AND METHOD OF PRODUCTION THEREOF

ABSTRACT OF THE DISCLOSURE

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A window structure type AlGaInP semiconductor laser  
able to suppress abnormal growth in the vicinity of a  
ridge and having good surface morphology, wherein a least  
one step-like structure is provided on a substrate having  
10 a surface tilted to a [0-1-1] direction from a (100)  
plane, a semiconductor stack is formed on the substrate  
and comprises an active layer including two types of  
Group III elements including at least indium (In) and  
Group V elements including phosphorus (P), a cladding  
15 layer of a first conductivity, a cladding layer of a  
second conductivity, end surfaces of an active layer  
serve as end surfaces of a resonator, a light guide is  
formed between and the end surfaces of the resonator, and  
the light guide is arranged at an upper step side of the  
20 step-like structure so that a portion of the light guide  
not including resonator end surfaces is positioned in the  
vicinity of the step-like structure and so that the  
resonator end surface portions of the light guide are  
farther from the step-like structure, and a method of  
25 production thereof.